WHAT IS CLAIMED IS:

1. A method for imaging a thrombus comprising the steps of:
   a. localizing a radiolabelled compound at the thrombus;
   b. acquiring image slices representing a physical property of the radiolabelled thrombus;
   c. assembling the image slices into a three-dimensional matrix of data;
   d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum value along each line; and
   e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.

2. The method of Claim 1 wherein the localization step comprises the step of localizing a compound that preferentially binds to activated platelets of the thrombus.

3. The method of Claim 2 wherein the localization step comprises the step of localizing a compound that binds to activated platelets of the thrombus via the glycoprotein IIb/IIIa receptor.

4. The method of Claim 3 wherein the localization step comprises the step of localizing a compound of the formula (I), and pharmaceutically acceptable salts thereof, at the thrombus:

$$|(Q)d'\text{-}L_n\text{-}C_h\cdot|_x\text{-}M_T(A_{L1})_y(A_{L2})_z$$

(I),

wherein,

Q is a glycoprotein IIb/IIIa binding compound;

d' is 1 - 20;

$L_n$ is a linking group of formula:

$$M^1\text{-}[Y^1(CR^{55}R^{56})_f(Z^1)_{f"}Y^2]_{f'}\text{-}M^2,$$

wherein:

$M^1$ is $-[(CH_2)_gZ^1]_{g'}-(CR^{55}R^{56})_{g"}-$;

$M^2$ is $-(CR^{55}R^{56})_{g"}-[Z^1(CH_2)_g]_{g'}-$;

g is independently 0-10;

g' is independently 0-1;

g" is independently 0-10;

f is independently 0-10;

f' is independently 0-10;

f" is independently 0-1;

$Y^1$ and $Y^2$, are independently selected at each occurrence from: a bond, O, $NR^{56}$, C=O, C(=O)O, OC(=O)O, C(=O)NH-, $C=NR^{56}$, S, SO, $SO_2$, $SO_3$, $NHC(=O)$, $(NH)_2C(=O)$, and $(NH)_2C=S$;

$Z^1$ is independently selected at each occurrence from a $C_6$-$C_{14}$ saturated, partially saturated, or aromatic carbocyclic ring system, substituted with 0-4 $R^{57}$; and a heterocyclic ring system, substituted with 0-4 $R^{57}$;

$R^{55}$ and $R^{56}$ are independently selected at each occurrence from: hydrogen; $C_1$-$C_{10}$ alkyl substituted with 0-5 $R^{57}$; and alkaryl wherein the aryl is substituted with 0-5 $R^{57}$;

$R^{57}$ is independently selected at each occurrence from the group: hydrogen, OH, $NHR^{58}$, $C(=O)R^{58}$, $OC(=O)R^{58}$, $OC(=O)OR^{58}$, $C(=O)OR^{58}$, $C(=O)NR^{58}$, C≡N, $SR^{58}$, $SOR^{58}$, $SO_2R^{58}$, $NHC(=O)R^{58}$, $NHC(=O)NHR^{58}$, $NHC(=S)NHR^{58}$; or, alternatively, when attached to an additional molecule Q, $R^{57}$ is independently selected at each occurrence from the group: O, $NR^{58}$, C=O, C(=O)O, OC(=O)O, C(=O)N-, $C=NR^{58}$, S, SO, $SO_2$, $SO_3$, NHC(=O), $(NH)_2C(=O)$, $(NH)_2C=S$; and,

$R^{58}$ is independently selected at each occurrence from the group: hydrogen; $C_1$-$C_6$ alkyl; benzyl, and phenyl;

$M_T$ is a transition metal radionuclide;

$C_h$ is a radionuclide metal chelator or bonding unit bound to the transition metal radionuclide selected from the group consisting of: $R^{40}N=N^+=$, $R^{40}R^{41}N-N=$, $R^{40}N=$, or $R^{40}N=N(H)-$;

$R^{40}$ is independently selected at each occurrence from the group: a bond to $L_n$, $C_1$-$C_{10}$ alkyl substituted with 0-3 $R^{52}$, aryl substituted with 0-3 $R^{52}$, cycloaklyl substituted with 0-3 $R^{52}$, heterocycle substituted with 0-3 $R^{52}$, heterocycloalkyl substituted with 0-3 $R^{52}$, aralkyl substituted with 0-3 $R^{52}$ and alkaryl substituted with 0-3 $R^{52}$;

$R^{41}$ is independently selected from the group: hydrogen, aryl substituted with 0-3 $R^{52}$, $C_1$-$C_{10}$ alkyl substituted with 0-3 $R^{52}$, and a heterocycle substituted with 0-3 $R^{52}$;

$R^{52}$ is independently selected at each occurrence from the group: a bond to $L_n$, =O, F, Cl, Br, I, $-CF_3$, -CN, $-CO_2R^{53}$, $-C(=O)R^{53}$, $-C(=O)N(R^{53})_2$, -CHO, $-CH_2OR^{53}$, $-OC(=O)R^{53}$, $-OC(=O)OR^{53a}$, $-OR^{53}$, $-OC(=O)N(R^{53})_2$, $-NR^{53}C(=O)R^{53}$, $-NR^{54}C(=O)OR^{53a}$, $-NR^{53}C(=O)N(R^{53})_2$, $-NR^{54}SO_2N(R^{53})_2$, $-NR^{54}SO_2R^{53a}$, $-SO_3H$, $-SO_2R^{53a}$, $-SR^{53}$, $-S(=O)R^{53a}$, $-SO_2N(R^{53})_2$, $-N(R^{53})_2$, $-NHC(=NH)NHR^{53}$, $-C(=NH)NHR^{53}$, $=NOR^{53}$, $NO_2$, $-C(=O)NHOR^{53}$, $-C(=O)NHNR^{53}R^{53a}$, $-OCH_2CO_2H$, 2-(1-morpholino)ethoxy;

$R^{53}$, $R^{53a}$, and $R^{54}$ are each independently selected at each occurrence from the group: hydrogen, $C_1$-$C_6$ alkyl, and a bond to $L_n$;

$A_{L1}$ is a first ligand wherein each of the y first ligands are selected from the group consisting of: dioxygen ligands, functionalized aminocarboxylates, halides, and combinations thereof;

$A_{L2}$ is a second ligand wherein each of the z second ligands are selected from the group consisting of: trisubstituted phosphines, trisubstituted arsines, tetrasubstituted diphosphines, tetrasubstituted diarsines, and combinations thereof;

x is independently 1-2;

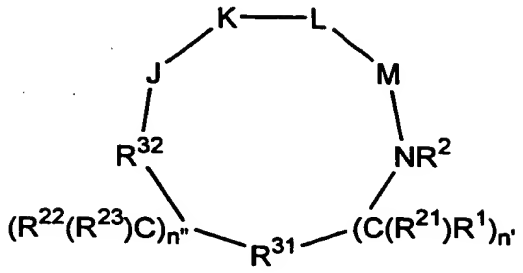
y is independently 1-2; and

z is independently 0-4.

5. The method of Claim 4 wherein $M_T$ is selected from the group consisting of: technetium-99m, rhenium-186, and rhenium-188.

6. The method of Claim 4 wherein the localization step comprises the step of localizing a compound of the

formula (I) at the thrombus wherein Q is of the formula (II),




(II)

or a pharmaceutically acceptable salt or prodrug form thereof wherein:

$R^{31}$ is a $C_6$-$C_{14}$ saturated, partially saturated, or aromatic carbocyclic ring system substituted with 0-4 $R^{10}$ or $R^{10a}$;

$R^{32}$ is selected from:

-C(=O)-;
-C(=S)-
-S(=O)$_2$-;
-S(=O)-;
-P(=Z)(Z$R^{13}$)-;

Z is S or O;

n" and n' are independently 0-2;

$R^1$ and $R^{22}$ are independently selected from the following groups:

hydrogen,
$C_1$-$C_8$ alkyl substituted with 0-2 $R^{11}$;
$C_2$-$C_8$ alkenyl substituted with 0-2 $R^{11}$;

$C_2$-$C_8$ alkynyl substituted with 0-2 $R^{11}$;
$C_3$-$C_{10}$ cycloalkyl substituted with 0-2 $R^{11}$;

aryl substituted with 0-2 $R^{12}$;

a 5-10-membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, said heterocyclic ring being substituted with 0-2 $R^{12}$;

=O, F, Cl, Br, I, $-CF_3$, -CN, $-CO_2R^{13}$, $-C(=O)R^{13}$, $-C(=O)N(R^{13})_2$, -CHO, $-CH_2OR^{13}$, $-OC(=O)R^{13}$, $-OC(=O)OR^{13a}$, $-OR^{13}$, $-OC(=O)N(R^{13})_2$, $-NR^{13}C(=O)R^{13}$, $-NR^{14}C(=O)OR^{13a}$, $-NR^{13}C(=O)N(R^{13})_2$, $-NR^{14}SO_2N(R^{13})_2$, $-NR^{14}SO_2R^{13a}$, $-SO_3H$, $-SO_2R^{13a}$, $-SR^{13}$, $-S(=O)R^{13a}$, $-SO_2N(R^{13})_2$, $-N(R^{13})_2$, $-NHC(=NH)NHR^{13}$, $-C(=NH)NHR^{13}$, $=NOR^{13}$, $NO_2$, $-C(=O)NHOR^{13}$, $-C(=O)NHNR^{13}R^{13a}$, $-OCH_2CO_2H$, 2-(1-morpholino)ethoxy;

$R^1$ and $R^{21}$ can alternatively join to form a 3-7 membered carbocyclic ring substituted with 0-2 $R^{12}$;

when n' is 2, $R^1$ or $R^{21}$ can alternatively be taken together with $R^1$ or $R^{21}$ on an adjacent carbon atom to form a direct bond, thereby to form a double or triple bond between said carbon atoms;

$R^{22}$ and $R^{23}$ can alternatively join to form a 3-7 membered carbocyclic ring substituted with 0-2 $R^{12}$;

when n" is 2, $R^{22}$ or $R^{23}$ can alternatively be taken together with $R^{22}$ or $R^{23}$ on an adjacent carbon atom to form a direct bond, thereby to form a double or triple bond between the adjacent carbon atoms;

$R^1$ and $R^2$, where $R^{21}$ is H, can alternatively join to form a 5-8 membered carbocyclic ring substituted with 0-2 $R^{12}$;

$R^{11}$ is selected from one or more of the following:

=O, F, Cl, Br, I, $-CF_3$, -CN, $-CO_2R^{13}$, $-C(=O)R^{13}$, $-C(=O)N(R^{13})_2$, -CHO, $-CH_2OR^{13}$, $-OC(=O)R^{13}$, $-OC(=O)OR^{13a}$, $-OR^{13}$, $-OC(=O)N(R^{13})_2$, $-NR^{13}C(=O)R^{13}$, $-NR^{14}C(=O)OR^{13a}$, $-NR^{13}C(=O)N(R^{13})_2$, $-NR^{14}SO_2N(R^{13})_2$, $-NR^{14}SO_2R^{13a}$, $-SO_3H$, $-SO_2R^{13a}$, $-SR^{13}$, $-S(=O)R^{13a}$, $-SO_2N(R^{13})_2$, $-N(R^{13})_2$, $-NHC(=NH)NHR^{13}$, $-C(=NH)NHR^{13}$, $=NOR^{13}$, $NO_2$, $-C(=O)NHOR^{13}$, $-C(=O)NHNR^{13}R^{13a}$, $-OCH_2CO_2H$, 2-(1-morpholino)ethoxy,

$C_1$-$C_5$ alkyl, $C_2$-$C_4$ alkenyl, $C_3$-$C_6$ cycloalkyl, $C_3$-$C_6$ cycloalkylmethyl, $C_2$-$C_6$ alkoxyalkyl, $C_3$-$C_6$ cycloalkoxy, $C_1$-$C_4$ alkyl (alkyl being substituted with 1-5 groups selected independently from: $-NR^{13}R^{14}$, $-CF_3$, $NO_2$, $-SO_2R^{13a}$, or $-S(=O)R^{13a}$),

aryl substituted with 0-2 $R^{12}$,

a 5-10-membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, said heterocyclic ring being substituted with 0-2 $R^{12}$;

$R^{12}$ is selected from one or more of the following:

phenyl, benzyl, phenethyl, phenoxy, benzyloxy, halogen, hydroxy, nitro, cyano, $C_1$-$C_5$ alkyl, $C_3$-$C_6$ cycloalkyl, $C_3$-$C_6$ cycloalkylmethyl, $C_7$-$C_{10}$ arylalkyl, $C_1$-$C_5$ alkoxy, $-CO_2R^{13}$, $-C(=O)NHOR^{13a}$, $-C(=O)NHN(R^{13})_2$, $=NOR^{13}$, $-B(R^{34})(R^{35})$, $C_3$-$C_6$ cycloalkoxy, $-OC(=O)R^{13}$, $-C(=O)R^{13}$, $-OC(=O)OR^{13a}$, $-OR^{13}$, $-(C_1$-$C_4$ alkyl)$-OR^{13}$, $-N(R^{13})_2$, $-OC(=O)N(R^{13})_2$, $-NR^{13}C(=O)R^{13}$, $-NR^{13}C(=O)OR^{13a}$, $-NR^{13}C(=O)N(R^{13})_2$, $-NR^{13}SO_2N(R^{13})_2$, $-NR^{13}SO_2R^{13a}$, $-SO_3H$, $-SO_2R^{13a}$, $-S(=O)R^{13a}$, $-SR^{13}$, $-SO_2N(R^{13})_2$, $C_2$-$C_6$ alkoxyalkyl, methylenedioxy, ethylenedioxy,

$C_1$-$C_4$ haloalkyl, $C_1$-$C_4$ haloalkoxy, $C_1$-$C_4$ alkylcarbonyloxy, $C_1$-$C_4$ alkylcarbonyl, $C_1$-$C_4$ alkylcarbonylamino, $-OCH_2CO_2H$, 2-(1-morpholino)ethoxy, $C_1$-$C_4$ alkyl (alkyl being substituted with $-N(R^{13})_2$, $-CF_3$, $NO_2$, or $-S(=O)R^{13a}$);

$R^{13}$ is selected independently from: H, $C_1$-$C_{10}$ alkyl, $C_3$-$C_{10}$ cycloalkyl, $C_4$-$C_{12}$ alkylcycloalkyl, aryl, -($C_1$-$C_{10}$ alkyl)aryl, or $C_3$-$C_{10}$ alkoxyalkyl;

$R^{13a}$ is $C_1$-$C_{10}$ alkyl, $C_3$-$C_{10}$ cycloalkyl, $C_4$-$C_{12}$ alkylcycloalkyl, aryl, -($C_1$-$C_{10}$ alkyl)aryl, or $C_3$-$C_{10}$ alkoxyalkyl;

when two $R^{13}$ groups are bonded to a single N, said $R^{13}$ groups may alternatively be taken together to form $-(CH_2)_{2-5}-$ or $-(CH_2)O(CH_2)-$;

$R^{14}$ is OH, H, $C_1$-$C_4$ alkyl, or benzyl;

$R^{21}$ and $R^{23}$ are independently selected from:

hydrogen;
$C_1$-$C_4$ alkyl, optionally substituted with 1-6 halogen;
benzyl;

$R^2$ is H or $C_1$-$C_8$ alkyl;

$R^{10}$ and $R^{10a}$ are selected independently from one or more of the following:

phenyl, benzyl, phenethyl, phenoxy, benzyloxy, halogen, hydroxy, nitro, cyano, $C_1$-$C_5$ alkyl, $C_3$-$C_6$ cycloalkyl, $C_3$-$C_6$ cycloalkylmethyl, $C_7$-$C_{10}$ arylalkyl, $C_1$-$C_5$ alkoxy, $-CO_2R^{13}$, $-C(=O)N(R^{13})_2$,

$-C(=O)NHOR^{13a}$, $-C(=O)NHN(R^{13})_2$, $=NOR^{13}$, $-B(R^{34})(R^{35})$, $C_3$-$C_6$ cycloalkoxy, $-OC(=O)R^{13}$, $-C(=O)R^{13}$, $-OC(=O)OR^{13a}$, $-OR^{13}$, $-(C_1$-$C_4$ alkyl$)-OR^{13}$, $-N(R^{13})_2$, $-OC(=O)N(R^{13})_2$, $-NR^{13}C(=O)R^{13}$, $-NR^{13}C(=O)OR^{13a}$, $-NR^{13}C(=O)N(R^{13})_2$, $-NR^{13}SO_2N(R^{13})_2$, $-NR^{13}SO_2R^{13a}$, $-SO_3H$, $-SO_2R^{13a}$, $-S(=O)R^{13a}$, $-SR^{13}$, $-SO_2N(R^{13})_2$, $C_2$-$C_6$ alkoxyalkyl, methylenedioxy, ethylenedioxy, $C_1$-$C_4$ haloalkyl (including $-C_vF_w$ where v = 1 to 3 and w = 1 to (2v+1)), $C_1$-$C_4$ haloalkoxy, $C_1$-$C_4$ alkylcarbonyloxy, $C_1$-$C_4$ alkylcarbonyl, $C_1$-$C_4$ alkylcarbonylamino, $-OCH_2CO_2H$, 2-(1-morpholino)ethoxy, $C_1$-$C_4$ alkyl (alkyl being substituted with $-N(R^{13})_2$, $-CF_3$, $NO_2$, or $-S(=O)R^{13a}$);

J is 3-aminopropionic acid or an L-isomer or D-isomer amino acid of structure $-N(R^3)C(R^4)(R^5)C(=O)-$, wherein:

$R^3$ is H or $C_1$-$C_8$ alkyl;

$R^4$ is H or $C_1$-$C_3$ alkyl;

$R^5$ is selected from:

hydrogen;

$C_1$-$C_8$ alkyl substituted with 0-2 $R^{11}$;

$C_2$-$C_8$ alkenyl substituted with 0-2 $R^{11}$;

$C_2$-$C_8$ alkynyl substituted with 0-2 $R^{11}$;

$C_3$-$C_{10}$ cycloalkyl substituted with 0-2 $R^{11}$;

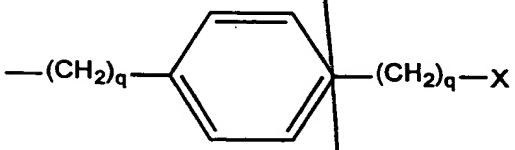
aryl substituted with 0-2 $R^{12}$;

a 5-10-membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, or O, said heterocyclic ring being substituted with 0-2 $R^{12}$;

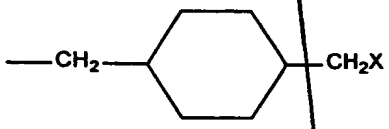
=O, F, Cl, Br, I, $-CF_3$, $-CN$, $-CO_2R^{13}$, $-C(=O)R^{13}$,

$-C(=O)N(R^{13})_2$, $-CHO$, $-CH_2OR^{13}$, $-OC(=O)R^{13}$, $-OC(=O)OR^{13a}$, $-OR^{13}$, $-OC(=O)N(R^{13})_2$, $-NR^{13}C(=O)R^{13}$, $-NR^{14}C(=O)OR^{13a}$, $-NR^{13}C(=O)N(R^{13})_2$, $-NR^{14}SO_2N(R^{13})_2$, $-NR^{14}SO_2R^{13a}$, $-SO_3H$, $-SO_2R^{13a}$, $-SR^{13}$, $-S(=O)R^{13a}$, $-SO_2N(R^{13})_2$, $-N(R^{13})_2$, $-NHC(=NH)NHR^{13}$, $-C(=NH)NHR^{13}$, $=NOR^{13}$, $NO_2$, $-C(=O)NHOR^{13}$, $-C(=O)NHNR^{13}R^{13a}$, $=NOR^{13}$, $-B(R^{34})(R^{35})$, $-OCH_2CO_2H$, 2-(1-morpholino)ethoxy, $-SC(=NH)NHR^{13}$, $N_3$, $-Si(CH_3)_3$, $(C_1\text{-}C_5$ alkyl$)NHR^{16}$;

$-(C_0\text{-}C_6$ alkyl$)X$;



, where q is independently 0,1;

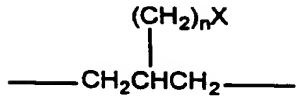


;

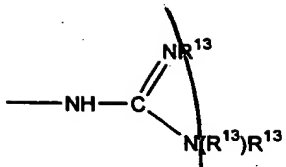
$-(CH_2)_mS(O)_{p'}(CH_2)_2X$, where m = 1,2 and p' = 0-2;

wherein X is defined below; and

$R^3$ and $R^4$ may also be taken together to form



, where n = 0,1 and X is



;

$R^3$ and $R^5$ can alternatively be taken together to form $-(CH_2)_t-$ or $-CH_2S(O)_{p'}C(CH_3)_2-$, where t = 2-4 and p' = 0-2; or

$R^4$ and $R^5$ can alternatively be taken together to form $-(CH_2)_u-$, where u = 2-5;

$R^{16}$ is selected from:

an amine protecting group;

1-2 amino acids;

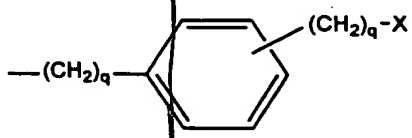
1-2 amino acids substituted with an amine protecting group;

K is a D-isomer or L-isomer amino acid of structure $-(R^6)CH(R^7)C(=O)-$, wherein:

$R^6$ is H or $C_1$-$C_8$ alkyl;

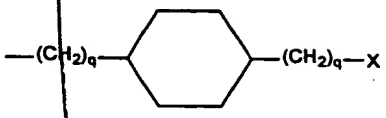
$R^7$ is selected from:

$-(C_1$-$C_7$ alkyl)X;



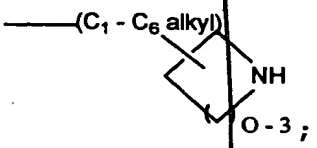
, wherein each q is

independently 0-2 and substitution on the phenyl is at the 3 or 4 position;



, wherein each

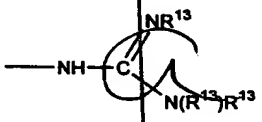
q is independently 0-2 and substitution on the cyclohexyl is at the 3 or 4 position;



$-(CH_2)_mO-(C_1-C_4$ alkyl$)-X$, where m = 1 or 2;

$-(CH_2)_mS(O)_{p'}-(C_1-C_4$ alkyl$)-X$, where m = 1 or 2 and p' = 0-2; and

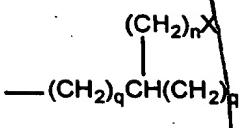
X is selected from:



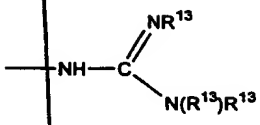
;

$-N(R^{13})R^{13}$; $-C(=NH)(NH_2)$; $-SC(=NH)-NH_2$; $-NH-C(=NH)(NHCN)$; $-NH-C(=NCN)(NH_2)$; $-NH-C(=N-OR^{13})(NH_2)$;

$R^6$ and $R^7$ can alternatively be taken together to form



, wherein each q is independently 1 or 2 and wherein n = 0 or 1 and X is $-NH_2$ or

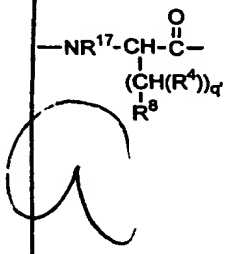


;

L is $-Y(CH_2)_vC(=O)-$, wherein:

Y is NH, $N(C_1-C_3$ alkyl), O, or S; and v = 1 or 2;

M is a D-isomer or L-isomer amino acid of structure



, wherein:

q' is 0-2;

$R^{17}$ is H, $C_1-C_3$ alkyl;

$R^8$ is selected from:

$-CO_2R^{13}$, $-SO_3R^{13}$, $-SO_2NHR^{14}$, $-B(R^{34})(R^{35})$, $-NHSO_2CF_3$, $-CONHNHSO_2CF_3$, $-PO(OR^{13})_2$, $-PO(OR^{13})R^{13}$, $-SO_2NH$-heteroaryl (said heteroaryl being 5-10-membered and having 1-4 heteroatoms selected independently from N, S, or O), $-SO_2NH$-heteroaryl (said heteroaryl being 5-10-membered and having 1-4 heteroatoms selected independently from N, S, or O), $-SO_2NHCOR^{13}$, $-CONHSO_2R^{13a}$, $-CH_2CONHSO_2R^{13a}$, $-NHSO_2NHCOR^{13a}$, $-NHCONHSO_2R^{13a}$, $-SO_2NHCONHR^{13}$;

$R^{34}$ and $R^{35}$ are independently selected from:

-OH,

-F,

$-N(R^{13})_2$, or

$C_1$-$C_8$-alkoxy;

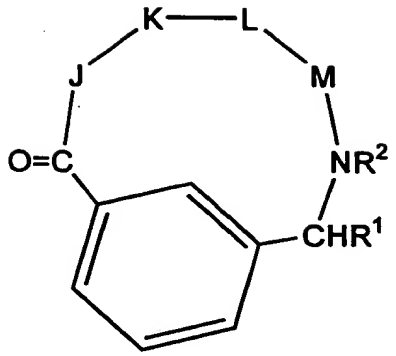
$R^{34}$ and $R^{35}$ can alternatively be taken together form:

a cyclic boron ester where said chain or ring contains from 2 to 20 carbon atoms and, optionally, 1-4 heteroatoms independently selected from N, S, or O;

a divalent cyclic boron amide where said chain or ring contains from 2 to 20 carbon atoms and, optionally, 1-4 heteroatoms independently selected from N, S, or O;

a cyclic boron amide-ester where said chain or ring contains from 2 to 20 carbon atoms and, optionally, 1-4 heteroatoms independently selected from N, S, or O.

7. The method of Claim 6 wherein the localization step comprises the step of localizing a compound of the formula (I) at the thrombus wherein Q is of the formula (III),




(III)

or a pharmaceutically acceptable salt or prodrug form thereof wherein:

the shown phenyl ring may be further substituted with 0-3 $R^{10}$;

$R^{10}$ is selected independently from: H, $C_1$-$C_8$ alkyl, phenyl, halogen, or $C_1$-$C_4$ alkoxy;

$R^1$ is H, $C_1$-$C_4$ alkyl, phenyl, benzyl, or phenyl-($C_1$-$C_4$)alkyl;

$R^2$ is H or methyl;

$R^{13}$ is selected independently from: H, $C_1$-$C_{10}$ alkyl, $C_3$-$C_{10}$ cycloalkyl, $C_4$-$C_{12}$ alkylcycloalkyl, aryl, -($C_1$-$C_{10}$ alkyl)aryl, or $C_3$-$C_{10}$ alkoxyalkyl;

$R^{13a}$ is $C_1$-$C_{10}$ alkyl, $C_3$-$C_{10}$ cycloalkyl, $C_4$-$C_{12}$ alkylcycloalkyl, aryl, -($C_1$-$C_{10}$ alkyl)aryl, or $C_3$-$C_{10}$ alkoxyalkyl;

when two $R^{13}$ groups are bonded to a single N, said $R^{13}$ groups may alternatively be taken together to form $-(CH_2)_{2-5}-$ or $-(CH_2)O(CH_2)-$;

$R^{14}$ is OH, H, $C_1$-$C_4$ alkyl, or benzyl;

J is β-alanine or an L-isomer or D-isomer amino acid of structure $-N(R^3)C(R^4)(R^5)C(=O)-$, wherein:

$R^3$ is H or $CH_3$;

$R^4$ is H or $C_1$-$C_3$ alkyl;

$R^5$ is H, $C_1$-$C_8$ alkyl, $C_3$-$C_6$ cycloalkyl, $C_3$-$C_6$ cycloalkylmethyl, $C_1$-$C_6$ cycloalkylethyl, phenyl, phenylmethyl, $CH_2OH$, $CH_2SH$, $CH_2OCH_3$, $CH_2SCH_3$, $CH_2CH_2SCH_3$, $(CH_2)_sNH_2$, $-(CH_2)_sNHC(=NH)(NH_2)$, $-(CH_2)_sNHR^{16}$, where s = 3-5; or

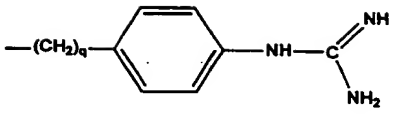
$R^{16}$ is selected from:
an amine protecting group;
1-2 amino acids; or
1-2 amino acids substituted with an amine protecting group;

$R^3$ and $R^5$ can alternatively be taken together to form $-CH_2CH_2CH_2-$; or
$R^4$ and $R^5$ can alternatively be taken together to form $-(CH_2)_u-$, where u = 2-5;

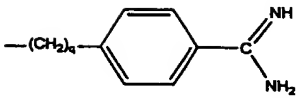
K is an L-isomer amino acid of structure $-N(R^6)CH(R^7)C(=O)-$, wherein:

$R^6$ is H or $C_1$-$C_8$ alkyl;

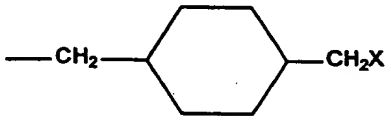
$R^7$ is:



;

 , where q = 0 or 1;

$-(CH_2)_rX$, where r = 3-6;

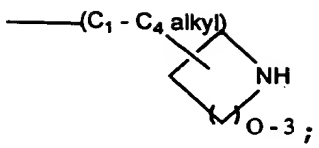


;

;

$-(CH_2)_mS(CH_2)_2X$, where m = 1 or 2;

$-(C_3\text{-}C_7$ alkyl)-NH-$(C_1\text{-}C_6$ alkyl);

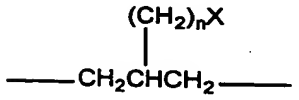



$-(CH_2)_m-O-(C_1-C_4$ alkyl$)-NH-(C_1-C_6$ alkyl), where m = 1 or 2;

$-(CH_2)_m-S-(C_1-C_4$ alkyl$)-NH-(C_1-C_6$ alkyl), where m = 1 or 2; and

X is $-NH_2$ or $-NHC(=NH)(NH_2)$, provided that X is not $-NH_2$ when r = 4; or

$R^6$ and R7 are alternatively be taken together to form

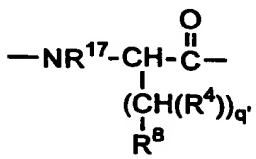



, where n = 0,1 and X is $-NH_2$ or $-NHC(=NH)(NH_2)$;

L is $-Y(CH_2)_vC(=O)-$, wherein:

Y is NH, O, or S; and v = 1,2;

M is a D-isomer or L-isomer amino acid of structure




, wherein:

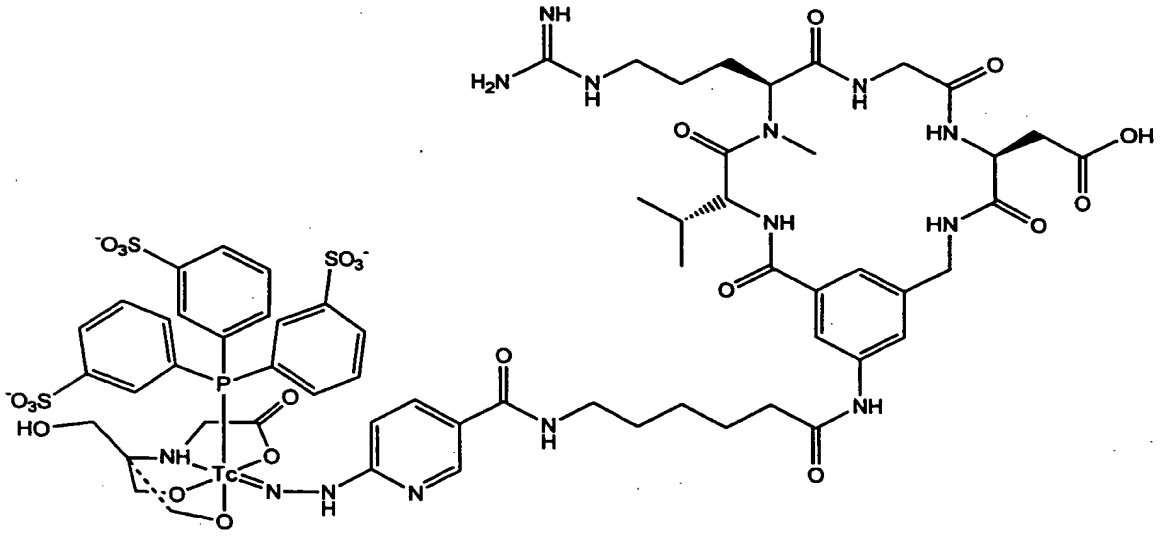
q' is 0-2;

$R^{17}$ is H, $C_1$-$C_3$ alkyl;

$R^8$ is selected from:

$-CO_2R^{13}$, $-SO_3R^{13}$, $-SO_2NHR^{14}$, $-B(R^{34})(R^{35})$, $-NHSO_2CF_3$, $-CONHNHSO_2CF_3$, $-PO(OR^{13})_2$, $-PO(OR^{13})R^{13}$, $-SO_2NH$-heteroaryl (said heteroaryl being 5-10-membered and having 1-4 heteroatoms selected independently from N, S, or O) , $-SO_2NH$-heteroaryl (said heteroaryl being 5-10-membered and having 1-4 heteroatoms selected independently from N, S, or O), $-SO_2NHCOR^{13}$, $-CONHSO_2R^{13a}$, $-CH_2CONHSO_2R^{13a}$, $-NHSO_2NHCOR^{13a}$, $-NHCONHSO_2R^{13a}$, $-SO_2NHCONHR^{13}$.

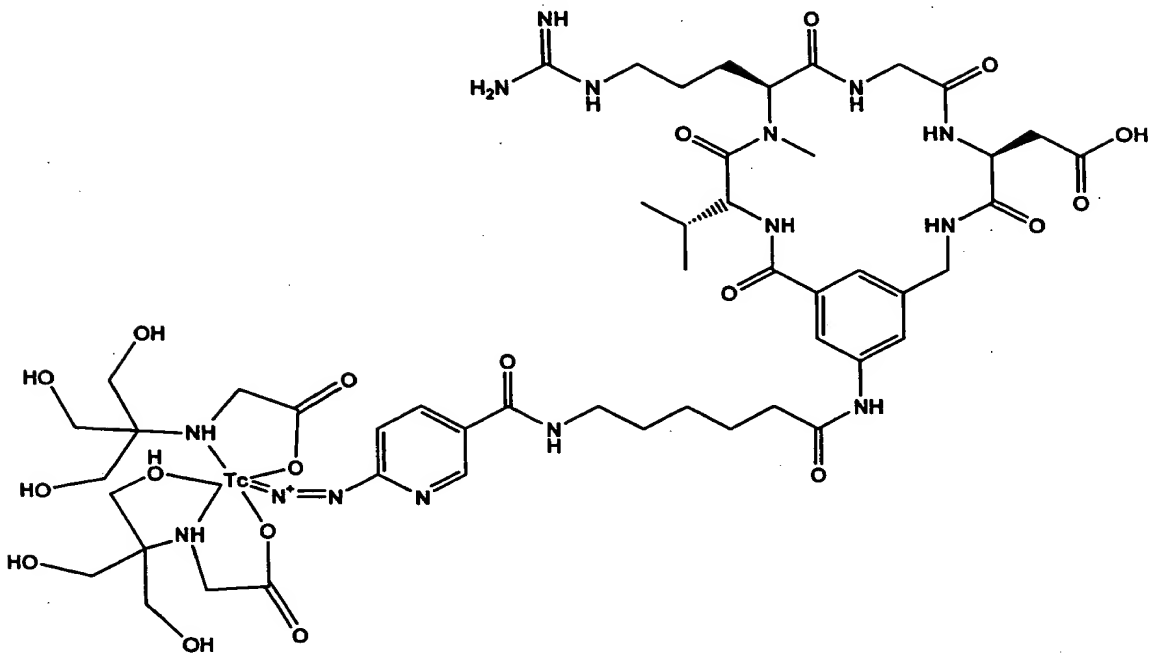
8. The method of Claim 4 wherein the localization step comprises the step of localizing a compound of the formula (IV) at the thrombus:



(IV).

9. The method of Claim 4 wherein the localization step

comprises the step of localizing a compound of the formula (V) at the thrombus:



(V).

10. The method of Claim 1 wherein the acquisition step comprises the step of acquiring image slices representing a concentration of radioactivity associated with the thrombus.

11. The method of Claim 10 wherein the acquisition step comprises the step of acquiring single photon emission computed tomography images of the thrombus.

12. The method of Claim 1 wherein the acquisition step comprises the step of acquiring transaxial image slices and further comprising the step of reformatting the transaxial image slices into image slices that are parallel to a long axis associated with the thrombus.

13. The method of Claim 1 comprising the step of displaying the two-dimensional array as a reprojected image.

14. The method of Claim 1 wherein the scanning step is performed at a series of angles.

15. The method of Claim 14 wherein the assignment step is performed at each of the series of angles.

16. The method of Claim 15 comprising the step of sequentially displaying the two-dimensional arrays as reprojected images.

17. A method for imaging a pulmonary embolus comprising the steps of:
    a. localizing a radiolabelled compound at the pulmonary embolus;
    b. acquiring image slices representing a physical property of the radiolabelled pulmonary embolus;
    c. assembling the image slices into a three-dimensional matrix of data;
    d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum value along each line; and
    e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.

18. A method for imaging an arterial thrombus comprising the steps of:
    a. localizing a radiolabelled compound at the arterial thrombus;
    b. acquiring image slices representing a physical property of the radiolabelled arterial thrombus;
    c. assembling the image slices into a three-dimensional matrix of data;
    d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum

value along each line; and

e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.

19. A method for imaging a coronary thrombus comprising the steps of:

a. localizing a radiolabelled compound at the coronary thrombus;

b. acquiring image slices representing a physical property of the radiolabelled coronary thrombus;

c. assembling the image slices into a three-dimensional matrix of data;

d. scanning the three-dimensional matrix of data along an array of parallel lines to determine a maximum value along each line; and

e. assigning the maximum value along each line to a pixel in a two-dimensional array, the position of the pixel corresponding to the position of the line in the array of parallel lines.